

AMENDMENT

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Please amend the claims as indicated below:

1. (Canceled)
2. (Canceled)

3. (Currently Amended) An optical fiber for transporting a beam of light from a laser light source and projecting the beam of light towards a target in an even illumination pattern, comprising:

an input end for receiving the beam of light; and
an exit end for projecting the beam of light towards the target,
wherein the exit end has at least one diffractive binary or multi-level optical pattern formed thereon, wherein said optical pattern provides an even illumination pattern across the target,
wherein the diffractive optical pattern is formed by one of the group selected from etching, molding and cutting.

~~The optical fiber as described in claim 1, wherein the diffractive optical pattern is one of a binary or multi-level diffractive pattern.~~

4. (Canceled)

5. (Currently Amended) The optical fiber as described in claim 34, wherein the exit end has a plurality of continuous optical diffractive patterns incorporated thereon.

6. (Canceled)
7. (Canceled)
8. (Canceled)
9. (Canceled)

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10. (Canceled)
11. (Canceled)

12. (Currently Amended) A system for recording images using a camera, comprising:
a plurality of laser emitting diodes; and
a plurality of fiber optics coupled to respective laser emitting diodes at an input end
thereof having an exit end with a binary or multi-level diffractive optical pattern formed thereon,
wherein the diffractive optical pattern is formed by one of the group selected from
etching, molding and cutting,
wherein the exit ends of the fiber optics are arranged in a circular fashion around the
camera,
wherein laser light emitted from each laser emitting diode travels through a respective
fiber optic and is projected onto a target after passing through the diffractive optical pattern to
illuminate a portion of the target for recording images of the target, and said laser light provides
an even rectangular illumination pattern across the target.
~~The system as described in claim 7, wherein the diffractive optical pattern is one of a~~
~~binary or multi-level diffractive pattern.~~

13. (Canceled)

14. (Currently Amended) The system as described in claim 127, wherein there are a plurality of optical diffractive patterns on the exit end of each fiber optic.

15. (Canceled)
16. (Canceled)